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B 専門関係論文集, 日本, 1996年 3月, 第 御, 愛知工業大学研究報告 31号B, 第29-34頁

この拒絶理由通知の内容に関するお問い合わせ、または面接のご希望がございましたら下記までご連絡下さい。特許審査第二部 生産機械 ロボティクス 松浦陽

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審査官補

The submitted reference was prepared by a foreign Patent Office, and is directed to a foreign counterpart application to the present US Patent Application. Consistent with Applicant's duty of disclosure under 37 CFR 1.56, Applicant recognizes that the Examiner may consider it relevant when making a patentability determination. However, this submission should not be misconstrued as an admission by the Applicant that the reference is either relevant or not relevant to patentability, especially since the reference was prepared by a foreign Patent Office that is governed by a different body of law than the USPTO.

Nevertheless, in the interest of full disclosure and good faith, Applicant submits the reference for consideration by the Examiner, and requests that the Examiner initial the attached Form PTO 1449, indicating the Examiner has considered this reference.

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Notification of Reasons for Refusal

Patent application number

Japanese Patent Application No. 2002-354263

Drafting date

September 18, 2007

Examiner

Yoh Matsuura 3752 3U00 Masaaki Miyata (and two others)

Representative of the applicant

Masaaki Miyata (al

Applicable articles

Article 36

This application should be refused according to the following reasons. If any arguments on these reasons for refusal exist, please file an argument within 60 days from the sending date of this notification.

Reason

For this application, the description of the claims does not satisfy the requirements prescribed in Patent Law Article 36 Paragraph 6 Item 1 or 2 in the following points.

Note

Claim 1-4

- (1) Although "the gain of the servo controller" is described in claim 1, the construction required is unclear and it is unidentified what parameter the gain relates to. (In the robotic devices, various kinds of gains, such as a gain concerning positioning, a gain concerning speed control, etc., exist.)
- (2) Although the term "low region gain" is used in claim 1-4, it is unidentified what kind of parameters is in low region for the low region gain.
- (3) The description that does not specify at all about a parameter region for making "the quantity of phase advance" big or small in claim 1-4 does not match with the description of the paragraph [0090] [0095], etc., in the detailed description of the invention.
- (4) Although "every each stage of the turning movement" is described in claim 1, it is

unclear whether it shows all states of the turning movement, it shows a specific state in the turning movement, it shows the state in which a specific state is changed in the turning movement, or it shows other matters.

Also, it is unclear how "the first actuator characteristic" and "the second actuator characteristic" are changed concretely in what kind of stage of the turning movement in detail.

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- (5) Although the point that "the viscosity resistance of the joint" becomes high or low is described in claim 1-4, it is unclear whether it has any relations with "the viscosity resistance of the actuator motor". (If "the viscosity resistance of the joint" is set low by that "the viscosity resistance of the actuator motor" is set to "low state" and "the viscosity resistance of the joint" is set high by that "the viscosity resistance of the actuator motor" is set to "high state", it is one idea to change appropriately like that in case of amendment.)
- (6) Although it is described in claim 2-4 that "low region gain", "quantity of phase advance", and "the viscosity resistance of the joint" are set high or low, it is unclear what is compared with to decide high or low.

Record of the result of the prior art reference searched

Searched Field IPC B25J5/00 B25J13/00

Prior art document

Published patent application No. HEI 11-300661 Published patent application No. HEI 5-337849

Published patent application No. HEI 10-309684 Published patent application No. 2001-198870 Published patent application No. 2002-283276 Published patent application No. HEI 5-245780 Published patent application No. 2004-174652 Published patent application No. 2004-174653

Naoki Kondo, Control of the direct drive manipulator using an ultrasonic motor, Memoirs of Aichi Institute of Technology B Specialized memoir, Japan March, 1996, No. 31 B, page 29-34

If there is an inquiry about the subject matter of this Notification of Reasons for Refusal or the hope of interview, please contact at the following.

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